

Trinity College Dublin The University of Dublin

Annual Report 2013 -2014



Members of the Board of Trinity College Dublin during the 2013/14 academic year were:

Ex-Officio Members

Provost, Dr Patrick Prendergast (Chair) Vice-Provost/Chief Academic Officer, Professor Linda Hogan Senior Lecturer/Dean of Undergraduate Studies, Professor Patrick Geoghegan Registrar, Professor Shane Allwright Bursar/Director of Strategic Innovation, Professor Gerard Lacey

Elected Fellows and Fellow Professors

Professor Sean Barrett (2010-2014) Professor Eileen Drew (2012-2016) Professor Robert Gilligan (2010-2014) Professor Nicola Marples (2010-2014) Professor John McGilp (2012-2016) Professor Cliona O'Farrelly (2012-2016) Professor Micheál Ó Siochrú (2012-2016) Professor Henry Rice (2010-2014)

Elected Non-Fellow Academic Staff

Professor Mélanie Bouroche (2010-2014) Professor William Dowling (2012-2016) Mr Dermot Frost (2012-2016) Professor Hugh Gibbons (2010-2014) Professor Des O'Neill (2012-2016)

Elected Non-Academic Staff

Mr Fred Cowzer (2012-2016) Mr Gerard Garrahan (2013-2016) Ms Shelia Dunphy (2010-2014)

Student Representatives

President Graduate Students' Union, Mr Ryan Kenny (2013-2014) President Students' Union, Mr Tom Lenihan (2013-2014) Education Officer Students' Union, Mr Jack Leahy (2013-2014) Welfare Officer Students' Union, Mr Stephen Garry (2013-2014)

External members

Dr Olive Braid<mark>en, no</mark>minated by the Arts Council (2010-2014) Mr Jackie Gallagher, nominated by the Minister for Education and Skills (2010-2015)

In Attendance Ex-Officio

Secretary, Mr John Coman Treasurer, Mr Ian Mathews

The Chief Operating Officer is in attendance at Board The Vice-Provost for Global Relations is in attendance at Board

Attendance at Board meetings and Board expenses are recorded in Appendix I and II respectively

This document is available in accessible format on request: (email: communications@tcd.ie)



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Trinity College Dublin Annual Report 2013/14



Introduction

This Annual Report outlines Trinity College Dublin's position and highlights our achievements during the academic year 2013/14 which was another very successful and productive year for the University. Key milestones include:

Students

Trinity continues to attract intellectually strong students from Ireland and abroad. In 2013 Trinity received 12% of first preference applications in the CAO system.

The accessibility of a Trinity education to all students of ability is an important element of our contribution to Ireland's future. Individuals from non-traditional learning groups such as those with disabilities, at different stages in their lives, and from disadvantaged sectors, have the opportunity to benefit from a Trinity education through such pioneering programmes as, for example, the Trinity Access Programmes. In 2013, 20% of all CAO places were filled by non-traditional students.

Trinity has led on the issue of university admissions, implementing a major national feasibility study to test whether there is a fairer and a better mechanism of admitting students to third-level than the reliance on 'the points race'. The feasibility study is an attempt to see whether, on a strictly controlled scale, it might be possible to identify and admit a diverse student body which is enthusiastic and passionate about learning, motivated and suitable for its chosen courses, and with the academic ability and potential to be inspired by College. Operated in partnership with the CAO, the new admissions route will be used to admit students on three Trinity courses using the new admissions routes in 2014/15 and 2015/16.

A ground-breaking new initiative to increase the number of incoming students from Northern Ireland was launched. In response to a recent decline in numbers from Northern Ireland, Trinity announced a feasibility study to find a new way of admitting A-Level applicants from across the EU, which will be tested in the first instance for applicants from Northern Ireland.

The Online Education pilot was launched in 2013/14. Online education is key for engaging new markets, strengthening the Trinity community, and consolidating Trinity's position as a critical actor in global higher education. Trinity's first fully online postgraduate course, the Diploma in Applied Social Studies, was launched in June 2014, starting in September 2014. Additionally Trinity entered the exciting arena of MOOCs with the launch of 'Irish Lives in War and Revolution: Exploring Ireland's History 1912-1923' on the FutureLearn platform. In excess of 18,000 people registered for the course, over half of them from outside Ireland. This indicates the huge global appetite for Trinity's research and teaching.

Five new postgraduate and two new undergraduate degree courses commenced and 4,555 students had their degrees conferred during the academic year. Students continued to enjoy the 'Trinity Experience' which extends beyond the curriculum to a rich tapestry of student clubs and societies that equip students for a life of leadership and civic participation.



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Research & Innovation

A highlight of the year was the launch of Trinity's Innovation and Entrepreneurship Strategy in November 2013. It lays out a blueprint for a renewed and integrated approach to what is seen as a central priority for Trinity in the immediate future – that is, the provision of a comprehensive innovation and entrepreneurship education for the whole University. The strategy will be underpinned by a significant expansion of the Trinity School of Business, including the appointment of a new Professor of Business Studies, and offering a full range of business-related programmes at undergraduate, postgraduate and executive education levels. A new €70 million building will house the Trinity School of Business, colocated with an Innovation and Entrepreneurship Hub.

The initial phase of implementation of this strategy included the launch of a new Office of Corporate Partnership and Knowledge Exchange (OCPKE), a single point of interaction to both existing and potential industry partners. Housing all of the functions necessary to support research collaboration and commercialization, the OCPKE serves as a direct pipeline enabling knowledge transfer to industry, thereby facilitating real job creation and impact to the Irish economy.

In the course of the year, the OCPKE received 58 disclosures of novel intellectual property created by Trinity researchers, filed 23 new patent applications, and granted 30 commercialisation licences. These figures show a very considerable increase over the equivalent figures for the previous academic year and represent a significant achievement. The formation of four new Trinity Campus Companies was approved, reflecting an increased emphasis on quality and sustainability.

Trinity staff members excelled in research achievements and received national and international distinction. The value of new research awards entered into in the year 2013/14 amounted to €67 million, bringing the total value of the Research Portfolio to over €480 million.

Trinity was awarded the most funding of any higher education institution in Ireland in the Seventh EU Framework Programme (FP7). A total of €90 million was received by Trinity academics for leading international research and innovation over the full duration of the programme.

Staff

The success of a university, and the delivery of its strategic objectives, cannot be attained without its key resource – its staff. To retain and improve the status of the University, Trinity must recruit, develop and maintain people of exceptional calibre. Ten international recruitment and selection processes were initiated for Professor positions within the University and there were six recruitment campaigns for Senior Administrative posts.

Capital Development

The capital development programme on campus continued to prosper. Among the completed projects were the refurbishment of the Physiology Building to house the Irish School of Ecumenics and Loyola Institute which was officially opened by the Minister for Education and Skills; new premises for the Academic Registry; and a Green Data Centre.







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Financial Position

The University has faced, and continues to face, a number of challenges particularly in recent years given the straitened economic circumstances in Ireland and the continuing decline in State funding for higher education. The financing of higher education on a sustainable basis is yet to be addressed comprehensively, although the Department of Education and Skills is due to report on long-term sustainable funding for Irish universities by the end of 2015. Since 2008 the core recurrent grant to universities has decreased by over 50%, the impact of which has been partially offset by increased student contribution charge and reduced pay rates as a consequence of Haddington Road and the Croke Park agreements.

Whilst Trinity continues to be extremely diligent and proactive in the manner in which it manages it finances, it faces many financial challenges which are due to pressures in public finances. The University continues to focus on key areas of non-Exchequer income generation: international students, online learning, commercialisation, research diversification, industry engagement and philanthropy to diversify and grow Trinity's income streams.

Even in this challenging environment Trinity has managed its income well and by actively managing its cost base through incentivised budget allocations and savings realised in procurement it has shown itself to be resilient throughout the period of economic crisis since 2008.

International Standing

Trinity was ranked 61st in the world and 18th in Europe in the 2013/14 QS World University Rankings across all indicators, with a top 50 ranking in four subjects and top 100 ranking in a further eight areas.

Conclusion

All the staff of the University, academic, administrative and support, must be thanked for their part in Trinity's achievements during 2013/14 – these could not have been attained without their dedication throughout the year.

The support of the Taoiseach, the Minister for Education and Skills, the Minister for Health, the Minister for Enterprise, Jobs & Innovation and the many Government Ministers is greatly valued. The University is also indebted to the Board and Executive of the Trinity Foundation, the Higher Education Authority, Science Foundation Ireland, the Health Research Board, the Irish Research Council and the many other agencies and individuals, public and private, who have supported the University.







UNIVERSITY ACTIVITIES

1. Academic Developments

1.1 World University Rankings

Trinity College Dublin is ranked Ireland's leading university in the QS World University Rankings, the Times Higher Education World University Rankings, and the Academic Ranking of World Universities, Shanghai.

Trinity is ranked 61st in the world and 18th in Europe in the 2013/14 QS World University Rankings across all indicators, with a top 50 ranking in four subjects and top 100 ranking in a further eight areas. The university's leading 50 subjects include English, Language & Literature in 25th place worldwide; 42nd in Modern Languages; 46th in Politics and International studies; and 48th in History.

The university is ranked in the QS top 100 universities in the world in each of the eight areas: Accounting & Finance; Biological Sciences; Economics & Econometrics; Geography; Law; Medicine; Pharmacy & Pharmacology; and Psychology. Trinity College is the leading Irish university in all of these subjects based on this survey. The 2014 QS World University Rankings by Subject evaluated 3,002 universities globally and ranked 689 institutions in total.

1.2 Quality

Recognised globally as a university of high quality in teaching and research, Trinity's education is distinctive in being research-led and student-centred. The University is committed to maintaining the exceptional quality of its undergraduate and postgraduate degrees and research and a major strength lies in Trinity's commitment of its staff to its students.

Election to Fellowship is an honour marking the exceptional quality of the University's academic staff. Research achievement or scholarship of a high order is the primary qualification for Fellowship, coupled with evidence of the candidate's contribution to the academic life of the University, as shown in particular by participation in the work of his or her Discipline or School and an effective record in teaching. Fourteen Fellows, including three Honorary Fellows, the Earl of Rosse, Brendan Parsons, founder of the Trinity College campus company, X Communications and Adjunct Professor in Computer Science, Dr Marie Redmond, and the Provost of Oriel College, Moira Wallace were announced on Trinity Monday 2014.

In 2013/14 the Quality Office facilitated quality reviews of the School of Mathematics and the School of Social Work & Social Policy, Accommodation and Catering, Comparative Medicine, Sport and Recreation, Trinity Research and Innovation and a strategic review of the proposal for a Trinity Translational Medical Institute. The reports arising from these reviews provide important feedback to the areas under review, and to the University, on academic and service provision.

Trinity continued its active engagement with Quality and Qualifications Ireland (QQI) and with other key national stakeholders in 2013/14. It chaired the Irish Universities Association (IUA) in 2014 and co-ordinated university sectoral responses to a number of QQI consultations on the development of policies and procedures to implement the new Qualifications and Quality Assurance (Education and Training) Act 2012.

Trinity participated in the second year of the Irish Survey of Student Engagement (ISSE) in 2013/14 and continues to support this initiative under the *National Strategy for Higher Education to 2030.*



2. Education

2.1 The Trinity Community

Trinity is a community of scholars, made up of students, academic staff, and administrative staff. Diversity is at the heart of what makes Trinity distinctive, and it attracts students and staff from all around the world, and from all kinds of different socio-economic backgrounds and experiences.

In total, there were 16,729 registered undergraduate and postgraduate students in 2013/14. Of these, approximately 84.7% were from the island of Ireland, 4.7% from other EU countries, 5% from North and Central America and 5.7% from other parts of the world (including non-EU countries in Europe). In 2013/14, 58% of the student population was female and 42% was male. A total of 12,355 (or 73.8%) students were registered on undergraduate programmes, 4,309 (25.8%) on postgraduate programmes and 65 (0.4%) on foundation courses.

The student community is made up of students from all kinds of socio-economic backgrounds and age groups. In recent years, the university has been increasing the number of non-traditional students it admits, including students with disabilities, and mature students. In 2013, 20% of all CAO places were filled by non-traditional students, and 25% of these were mature students.



Entrance Exhibition Awardees Dearbhail Ní Cathain, Florence Fanning, Rachael Bowe and Eva Cooney of Our Lady's Bower Secondary School, Athlone, County Westmeath with Deputy Principal, Anne Beades

2.2 Admissions Statistics

In 2013 Trinity received 7,919 (11.7%) of first preference applications in the CAO system, a small decline from 2012 when the figure was 8,142 (12%). Of the 67,729 people who applied for Level 8 courses in Irish higher education institutions through the CAO in 2013, 18,161 listed Trinity for one or more of their CAO course preferences (27%), a slight decline on the figures for 2012 when the number was 18,995 (28%). Trinity has the second highest number of overall first preferences in the country, but the largest number of first preferences to available places.

A total of 463 first-year students were awarded special 'Entrance Exhibition Awards'. These students received 560 points or higher in their Leaving Certificate examination or equivalent second-level examination in the EU. Of this figure, 421 were Leaving Certificate students, 30 were A-level students and 12 students held other EU qualifications. The significant decrease from the previous year (786) is accounted for by the exclusion of the bonus points for Leaving Certificate mathematics in the calculation of the necessary 560 points.

Trinity has led on the issue of university admissions, implementing a major national feasibility study to test whether there is a fairer and a better mechanism of admitting students to third-level than the reliance on 'the points race'. Twenty-five places were set aside for entry in September 2014 in the Trinity Feasibility Study in Admissions in three courses: Law (10 places), History (10 places), and Ancient and Medieval History and Culture (5 places).

Using a holistic admissions system that works successfully internationally, the process is completely anonymous, with no interviews or teacher references, and assesses a student's academic ability, potential and suitability for the course. By using the Relative Performance Rank (RPR) of the candidate, it looks both at the Leaving Certificate results and the context in which the results were achieved. Applicants are also assessed on the basis of supplementary materials, including an essay. The study is an attempt to inform national policy in the area, and has been hailed by the Dean of Admissions and Financial Aid at Harvard University, Dr William R. Fitzsimmons, as sending 'a powerful message that with hard work anything is possible, including admission to Trinity or to any university in the world.'



2.3 Northern Ireland Engagement Programme

In July 2014 Trinity launched a ground-breaking new initiative to increase the number of incoming students from Northern Ireland. In response to a recent decline in numbers from Northern Ireland, Trinity announced a feasibility study to find a new way of admitting A-Level applicants from across the EU, which will be tested in the first instance for applicants from Northern Ireland.

During the 2013/14 academic year Trinity embarked on an ambitious Northern Ireland Engagement Programme, visiting schools and careers fairs across Northern Ireland with student ambassadors from the current student community, and reconnecting with schools, parents, teachers and alumni. The feasibility study draws on that work by seeking to remove one of the biggest obstacles, that only one in eight students in Northern Ireland take four A-Levels. The aim is to triple the numbers of students admitted from Northern Ireland each year, so that 8% of the student body will be from Northern Ireland, thus reaffirming Trinity's historic mission as a university for the whole island, attracting students with ability and potential from all over.



Celebrating being elected Scholars

2.4 Scholarships

Foundation Scholarship is a University institution with a long history and high prestige, and is a distinctive feature of student life at Trinity. A Scholarship at Trinity College remains the most prestigious undergraduate award in the country, and it is an award that has undoubtedly helped to foster long-lasting links between many outstanding graduates and the University. A principal objective of Trinity is the pursuit of excellence: one of the most tangible demonstrations of this is the institution of Scholarship.

In the 2013/14 academic year 100 students were awarded Scholarships on Trinity Monday 2014. It was also the first year in which the examination was only open to Senior Freshman students.

Recipients of the scholarships represented all faculties: the Faculty of Arts, Humanities and Social Sciences (23); Faculty of Engineering, Mathematics and Science (30); Faculty of Health Sciences (35); and Multi-Faculty (12).

2.5 The Curriculum – New Courses

The following courses commenced at the beginning of the 2013/14 academic year:

Undergraduate

- BSc in Radiation Therapy in conjunction with Singapore Institute of Technology
- Bachelor in Music Composition and a Bachelor in Music Performance offered by the Royal Irish Academy of Music with the degrees awarded by the University of Dublin.

Postgraduate

- M.Phil. in Creative and Cultural Entrepreneurship
- LL.M. in International and European Intellectual Property Law
- Master in Music Performance
- M.F.A. in Stage Design
- M.F.A. in Theatre Directing



2.6 Commencements, Firsts and Gold Medal Awards

Honorary Degree recipients Johnny Giles, David Went, John Laver, Lelia Doolan, and Jane Goodall with Provost, Dr Patrick Prendergast, and Chancellor of the University, Mary Robinson

A total of 4,555 degrees were conferred (2,784 primary degrees and 1,771 higher degrees) in 34 separate commencement ceremonies in 2013. Four hundred and nine students received first class honors at the degree examinations in 2013/14 and, of these, 49 were awarded Gold Medals.

Honorary conferring took place at the Commencement ceremonies on 6 December 2013 and 27 June 2014. At the Winter Commencements, distinguished sportsman and commentator, Johnny Giles, a world leading expert on chimpanzees, Jane Goodall, film maker, Lelia Doolan, leading phonetician, John Laver and chairman of the Board of the Irish Times Ltd, David Went were honoured. As a mark of respect to Nelson Mandela, who was conferred with an Honorary Degree in April 2000 by the University, there was a minute's silence at the ceremony and the University flag was at half-mast.

Recipients of honorary degrees at the Summer Commencements were distinguished author, Amos Oz, former Intel CEO, Craig Barrett, Lawyer and Founder of Irish Hospice Foundation, Mary Redmond and former Professor of Organic Materials Physics in the Tokyo Institute of Technology, Atsuo Fukuda.

Trinity College Dublin and Singapore Institute of Technology signed an agreement in October 2012 commencing a partnership between the two institutions and the launch of two programmes in Physiotherapy and Occupational Therapy which give recognition to the three-year diplomas in these disciplines from Nanyang Polytechnic. Under the agreement students complete a one year programme, part of which includes studies and/or placements in Ireland. On completion of the programme students are awarded a degree from Trinity College Dublin. The first cohort of students registered in September 2012 and graduated in June and December 2013. In 2014 the partnership was expanded to include Radiation Therapy and introduced a new course in Diagnostic Radiography.

The Innovation Academy, jointly run by Trinity, UCD and Queen's University Belfast, continued to offer innovation and entrepreneurial training to postgraduates, encouraging them to consider the societal and economic impact of their research, and to convert their knowledge into products, services and policies. In January 2014 the Innovation Academy joined forces with the Science Gallery to deliver a 12-week Idea Translation Lab on the theme of 'strange weather'. The programme, modelled on the Harvard University Idea Translation Lab, saw 30 undergraduates, drawn from all faculties, producing group projects inspired by science, art, and design – these projects subsequently linked into the Science Gallery's July exhibition.

Since its inception in 2010 the TCD-UCD Innovation Alliance partnership has proven to be an exciting intellectual space that promotes creativity and innovative thinking among postgraduates, and beyond. Over 400 PhD students from a variety of disciplines have engaged with the Academy to date.

2.7 Trinity Access Programmes

The Trinity Access Programmes (TAP) are a range of initiatives aimed at increasing the participation rate at third level of young adult and mature students from under-represented socio-economic groups. The programmes were established as part of an overall strategy to address low progression rates to third level by students in particular socio-economic groups and are an illustration of the University's social mission in action.

TAP owes its continued success to a network of highly productive partnerships with schools, further education colleges, families, students, Trinity staff, businesses, community groups and other higher education institutions, nationally and internationally.



TAP receives its funding from the Higher Education Authority through the Strategic Initiatives Fund, the Department of Education and Skills and a number of individual and corporate donors. These funds support the following initiatives:

- The School and Community Outreach Links
- The Pre-University Preparation Courses: Young Adults and Mature Students, TCD
- The Partnership Courses in Liberal Arts: TCD and City of Dublin Vocational Education Committee Colleges (CDVEC)
- The Post Entry Progression Programme
- Research and Evaluation.

There were 259 admissions to Trinity College through the Trinity Access Programmes in 2013/14, an increase of 11.2% to the previous academic year.

Linking with over 40 primary and second-level schools which have little or no tradition of progression to thirdlevel, TAP, with the assistance of some 30 Trinity departments, enabled over 4,000 students, parents and teachers to participate in on-campus activities during 2013/14, such as the Maths and Science Scholars Programme for 6th class pupils, the Med Day for Junior Cycle students, and Summer Schools.

2.8 Provost's Teaching Awards



Recipients of the 2014 Provost's Teaching Awards Dr Louise Gallagher, School of Nursing and Midwifery, Dr Niamh Connolly, School of Law, and Dr David Prendergast, School of Law, who received the Early Career Award

The Provost's Teaching Awards are the University's principal means of acknowledging those academic staff who have made an outstanding contribution in the pursuit of teaching excellence in Trinity and who promote teaching as a scholarly activity.

The awardees in 2014 were: Dr Louise Gallagher, School of Nursing and Midwifery, Dr Niamh Connolly, School of Law, and Dr David Prendergast, School of Law, who received the Early Career Award. All recipients were recognised for their dedication and commitment to teaching and learning excellence.

2.9 Online Education

The Online Education pilot, led by a new Associate Dean for Online Education, Prof Timothy Savage was launched in 2013/14. Online education is key for engaging new markets, strengthening the Trinity community, and consolidating Trinity's position as a critical actor in global higher education. This exciting initiative aims to broaden access and provide an online student experience that is in line with the research-led Trinity education, based on academic rigour, and building upon the existing culture of scholarship, innovation and creativity.

Trinity's first fully online postgraduate course, the Diploma in Applied Social Studies, was launched in June 2014, starting in September 2014. The course has been designed to provide access for those who would not otherwise be able to experience the unique education which Trinity offers.

Additionally Trinity entered the exciting arena of MOOCs with the launch of 'Irish Lives in War and Revolution: Exploring Ireland's History 1912-1923' on the FutureLearn platform. This six-week free online course was developed by the team of Prof Ciaran Brady, Dr Anne Dolan and Dr Ciarán Wallace from the School of History and Humanities, in conjunction with the online education unit. Through innovative approaches, the course introduces global learners to the history of Ireland in one of its most tumultuous periods. When the course opened for registration at the end of August 2014, 10,000 signed up in the first few days. In excess of 18,000 registered for the course, over half of them from outside Ireland. This indicates the huge global appetite for Trinity's research and teaching.



3. The Student Experience

The 'Trinity Experience' extends beyond the curriculum to a rich tapestry of student clubs and societies that equip students for a life of leadership and civic participation. The tutorial service for students also contributes to the personal ethos.

3.1 Student Support Services

At the heart of all the University's activities is the commitment to the intellectual and personal development of all of its students. To enhance the student experience, Student Support Services offer a comprehensive range of administrative and support services including Accommodation and Catering, the Student Health Centre, Counselling Services, the Chaplaincy, Careers Advisory Service, the College Day Nursery and the Sports and Recreation Department. These services ensure that the welfare of students and their social, cultural and emotional development are provided for and managed in a balanced and holistic manner.

3.2 Student Achievements

During the 2013/14 academic year, students and student societies were successful in many areas.

Over 740 Trinity College students were named on the Dean of Students' Roll of Honour, commended for their participation in extracurricular, voluntary activity both inside and outside the University. The Roll of Honour aims to recognise the learning outside the classroom which students gain through various types of extracurricular voluntary activity, including tutoring young children in the community, running clubs and societies, campaigning for justice, organising donations of medical supplies to third world countries and much more.

Seven Trinity students/graduates were honoured with prestigious Fulbright Awards in 2014. Since 1957, the Fulbright Awards are awarded annually by the Irish and U.S. governments and provide Irish students, scholars, and professionals with the opportunity to study, lecture, and research at top universities and institutions throughout the United States. Three Trinity students were selected from over 400 applicants to participate in the 2014 Washington Ireland Program. Hannah McCarthy, Jack Danahar and Emlyn Gavin, all final year Law and Business students, built their skills through work experience, educational opportunity, and hands-on citizenship during an eight-week internship in Washington.



2013 Intel Women in Technology Scholars Romy Lynch, Ciara Maguire, Eleanor McSweeney, Claire Pentony and Alison Hennessy

Ciara Maguire, Eleanor McSweeney and Alison Hennessy were recipients of the 2013 Intel Women in Technology scholarships. The scholarship programme aims to encourage a new generation of high-achieving women to take up the challenge of a career in science and technology.

Five Trinity students, Jack Hogan, Lara Cassidy, Shane McEntagart, Rián Derrig and Michael Gregg, received the Bram Stoker Gold Medal at the prestigious 2013 Undergraduate Awards, the only pan-discipline international academic awards programme connecting the world's top students across the sciences, humanities, business, and creative arts. Trinity received the highest number of overall awards. Shane McEntagart also had the unique distinction of winning two national awards, in the Languages and Linguistics category, and also in the Mathematical and Physical Sciences category.



Student society highlights during the year include:

DU Players' Fionn Foley was awarded the Best Actor Award in the Irish Student Drama Awards on foot of his performance in 'Life in Our Blood'.

Trinity Orchestra gained much attention on a national and international level, featuring in the media for its covers of popular artists and taking to the Main Stage at Forbidden Fruit and Electric Picnic music festivals.

Students from Trinity were presented with the most awards for their contributions to student life and activism over the academic year at the Student Achievement Awards Ireland (SAAI) 2014. The awards ceremony, attended by President Michael D Higgins, recognised the achievements of third-level students in Ireland for the benefit of their college, community and country. Trinity students were nominated in 17 categories for their contributions to student life out of a possible 24 and took home seven awards.

These included SS Social Science student, Mark Walsh, who received the award for Class Representative of the Year and Shauna Watson, SS Law and Business student, who was awarded Students' Union Part-Time Officer of the Year for her work organising TCDSU campaigns.

The University Times took home Publication of the Year and SF Psychology student Aisling Curtis won Journalist of the Year for her articles published in *The University Times*. Trinity Students' Union Welfare campaign 'TCDtalks' was winner of the 'Mental Health Campaign of the Year', awarded by the National Centre for Youth Mental Health, Headstrong.

SS Law student Jack Cantillon and 4th year Medicine student Claire Cullen received the award for Charity Event of the Year at the SAAI for their work on Jailbreak14. Kyryll Chulak and Salim Sebaoui, Trinity medical students, were the overall winners of the annual Jailbreak student charity event, making it to Sydney without spending a penny. Overall 38 Trinity teams participated, raising over €15,000 for charity.

An Cumann Gaelach won the 'Irish Language Campaign of the Year' for their outstanding efforts to promote Irish language across campus. Two days later they won Best Irish Language Student Society award at Glór na nGael, for a second year in a row. An Cumann Gaelach also won the Best Large Society and Best Overall Society award at the annual Central Societies Committee (CSC) Society of the Year Award and its Chairperson, Niamh Ní Chróinín won Best Individual for her role in the society.

SoFIA, the Society for International Affairs set up in 2013 to promote the discussion of diplomacy and diplomatic affairs won Best New Society at the CSC Society of the year awards.

Eighteen Trinity Sport Scholarships were awarded in 2013/14, recognising students' achievements at county, provincial, national and international levels in thirteen sports. Recipients were: Victoria Mullin (Air Pistol Shooting), Prakash Vijayanath (Badminton), Aisling Smith (Kayak), Tom Brennan (Kayak), Iomhar MacGiolla Phádraig (Kayak), Scott Flanigan (Sailing), Ciarán McGahon (Association Football), Paul Coughlan (Hurling), Jacinta Brady and Lucy Mulhall (Ladies Gaelic Football), Paul McPadden (Men's Gaelic Football), Maria O'Sullivan (Harriers & Athletics), Stephen Ludgate (Hockey), Avril Dooley-O'Carroll (Ladies Hockey), Anna-May Whelan (Ladies Hockey), Sinéad Dolan (Rowing), Hannah McCarthy (Rowing) and Melanie Young (Three Day Eventing).

Danny Sutcliffe, 3rd year Business Economics Social Science student and Trinity GAA player, received a national Hurling All Star Award for the 2013 season while Trinity sports scholarship students Victoria Mullin and Prakash Vijayanath represented their countries in the 2014 Glasgow Commonwealth Games.

Six students were awarded with University Colours in 2014. The Trinity Pink, designed to correspond, although not exactly, to the Light Blue of Cambridge and the Dark Blue of Oxford, is awarded on individual sporting merit which is generally assessed in terms of outstanding club performance, representative selection or external achievement. Pinks were awarded to Aisling Smith (Kayak), Ciarán O'Neill (Trampoline), Rebecca Woods (Harriers & Athletics), Sam Mehigan (Ultimate Frisbee), Brian du Toit and Patrick Lavelle (Rugby).



4. Research Activities

4.1 Research Themes

Trinity is recognised as one of the world's leading research-intensive universities and its research continues to address issues of global societal and economic importance. The University's research strategy is based on developing multidisciplinary areas in which Trinity has the critical mass of world-class researchers needed to deliver research of global consequence.

Among the priority research themes being addressed by Trinity researchers are ageing, nanoscience and materials, telecommunications, neuroscience, human identity, cancer, international integration, creative arts practice, and the inclusive society. These are topics that not only address issues of immediate and long-term concern to society but offer opportunities for future economic development. The University's commitment to a research-led education means that our students are exposed to leaders in their discipline, to the latest knowledge and ideas, and to an education that emphasises analytical skills and creative thinking, and gives students an opportunity to develop a broad range of skills by engaging in personal research.

This excellence in research underpins Trinity's Innovation and Entrepreneurship strategy. Research is central to the generation of the new disruptive ideas that will underpin future sustainable businesses. The knowledge created by Trinity is critical for the economic development of Ireland as it is for the education on offer to our students.

Trinity's research themes are supported by a set of research institutes that provide the infrastructure needed to support multi-disciplinary research as well as engagement with enterprise and social partners working in partnership with Trinity's 24 schools.

Trinity is playing a leading role in several major national longitudinal studies, including children's research and ageing, and hosts national centres for intelligent content, nanoscience and telecommunications research supported by Science Foundation Ireland (SFI) on campus. Trinity's major research institutes in areas such as neuroscience, biomedical sciences and arts and humanities are firmly established among the international leaders in their fields. Trinity is actively involved in significant national collaborative research ventures such as the National Digital Research Centre (NDRC), Molecular Medicine Ireland (MMI) and the National Institute for Bioprocessing Research and Training (NIBRT).

4.2 Research Funding

Research expenditure rose by 10% to €87 million in 2013/14¹ reflecting the University's success in securing new awards over the past number of years, in particular from SFI and the EU. The value of new awards entered into in the year 2013/14 amounted to €67 million, bringing the total value of the Research Portfolio to over €480 million.

The average contribution to indirect costs from research activity of 18% continues to be below the full economic cost of hosting the research resulting in the core budget cross-subsidising research activity. This position is not sustainable.

There were 1,572 active research accounts and research activity supported c. 1,400 individuals in 2013/14.

Source of Research Funding	Year ended 30 Sept 2014	
Science Foundation Ireland	35%	
Enterprise Ireland	5%	
Higher Education Authority	6%	
Irish Research Council	6%	
Commission of the European Union	20%	
Other	28%	

¹As per the Green Book

Trinity was awarded the most funding of any higher education institution in Ireland in the Seventh EU Framework Programme (FP7). A total of €90 million was received by Trinity academics for leading international research and innovation over the full duration of the programme. Trinity FP7 research highlights include: clinical trials for a new Alzheimer's Disease treatment; developing nanomaterials for efficient energy storage; and cutting edge research in Medieval and Modern European History.

4.3 New Developments

A particularly significant highlight of the year was the launch of Trinity's Innovation and Entrepreneurship Strategy in November 2013. The strategy lays out a blueprint for a renewed and integrated approach to what is seen as a central priority for Trinity College in the immediate future – that is, the provision of a comprehensive innovation and entrepreneurship education for the whole University. The strategy will be underpinned by a significant expansion of the Trinity School of Business, including the appointment of a new Professor of Business Studies, and offering a full range of business-related programmes at undergraduate, postgraduate and executive education levels. A new €70 million building will house the Trinity School of Business, co-located with an Innovation and Entrepreneurship Hub.

The initial phase of implementation of this strategy included the launch, in March 2014, of a new Office of Corporate Partnership and Knowledge Exchange (OCPKE), a single point of interaction to both existing and potential industry partners. Housing all of the functions necessary to support research collaboration and commercialization, the OCPKE serves as a direct pipeline enabling knowledge transfer to industry, thereby facilitating real job creation and impact to the Irish economy.

Innovation and Entrepreneurship have been central to the philosophy of Trinity College for the past decade, and the new Innovation and Entrepreneurship Hub along with the OCPKE represents a clear example of Trinity's ongoing efforts to embed a culture of innovation and entrepreneurship amongst academic staff and students. They will continue to cultivate these values internally in order to develop and maintain Trinity's contribution to a flourishing innovation ecosystem in Ireland, which will include support for the creation of more than 160 start-up companies over the next three years.



Trinity Biomedical Sciences Institute

The Trinity Biomedical Sciences Institute (TBSI) published its first progress report in June 2014 which revealed that since opening in 2011, the Institute has created 119 jobs and partnered with 76 companies to carry out groundbreaking research into some of society's most significant health challenges. In the period covered in the report (January 2012 – May 2014), the institute also raised €36 million in interdisciplinary research funding, built strong ties with UCD's Conway Institute under the joint Innovation Alliance, and spun out three companies involved in drug discovery and development, and cancer treatment - Opsona Therapeutics, Trino Therapeutics and TriMod.

4.4 Scholarship and Award Success

Trinity staff members continued to excel in research achievements and received national and international distinction. Among the awards received by Trinity researchers and staff are:

The Royal Irish Academy (RIA) enrolled five Trinity academics as new members in 2014: Prof Andrew Bowie, Professor in Immunology; Prof Ciaran Brady, Professor of Early Modern History and Historiography; Prof Padraic Fallon, Professor of Translational Immunology; Prof Rose Anne Kenny, Professor of Geriatric Medicine; and Prof Mani Ramaswami, Professor of Neurogenetics. Election to the RIA is the highest academic honour in Ireland and is a public recognition of academic achievement.





Trinity's new Royal Irish Academy members Ciaran Brady, Mani Ramaswami, Rose Anne Kenny, Padraic Fallon and Andrew Bowie, with Provost, Dr Patrick Prendergast

Prof Shane O'Mara, Professor of Experimental Brain Research at the Trinity College Institute of Neuroscience became the first recipient in Ireland of a Senior Investigator Award under the Science Foundation Ireland, Health Research Board and Wellcome Trust Biomedical Partnership, which funds biomedical and clinical research in the Republic of Ireland. Prof O'Mara was given a Joint Award of €2.2 million, over a six year period, with Prof John Aggleton of the University of Cardiff for their project 'The Cognitive Thalamus: More than a relay' concerning how the brain can support memory function.

Two researchers, Prof Valeria Nicolosi of the Advanced Materials and BioEngineering Research Centre (AMBER) and Schools of Physics and Chemistry, and Dr Matthew Campbell of the Smurfit Institute of Genetics were presented with the SFI President of Ireland Young Researcher Award (PIYRA) at Áras an Uachtaráin by the President of Ireland in March 2014. PIYRA is SFI's most esteemed award for researchers who have shown exceptional promise as possible future leaders in international research and are known for excellence in their fields.

Two Trinity scientists were chosen for the Thomson Reuters 2014 World's Most Influential Scientific Minds List. Luke O'Neill, Professor of Biochemistry, School of Biochemistry and Immunology in the Trinity Biomedical Sciences Institute (TBSI) and Jonathan Coleman, Professor of Chemical Physics in the School of Physics appear in the Thomson Reuters Highly Cited Researchers website and 2014 World's Most Influential Scientific Minds report. They were selected to join 3,000 authors from around the world in Thomson Reuters' new compilation of influential names in science. Professors O'Neill and Coleman join only seven other Irish scientists on this illustrious list of authors who rank among the top 1% of most cited authors for their subject field and year of publication (between 2002 and 2012).

Trinity led the way in securing Ireland's first funding award under Horizon 2020, the new EU Framework Programme for Research and Innovation in June 2014 when an award of €175,000 was granted to the TBSI to host Discover Research Dublin in September 2014 and 2015. A showcase of research activities, Discover Research Dublin invites the public to engage with the world of research in an action packed programme, where leading researchers in their laboratories provide a wide range of demonstrations and hands-on activities, allowing for discovery, questions and audience participation.

Over 50 free, exciting, and interactive events and demonstrations were open to the public on European Researchers' Night in September 2014. Coordinated by Trinity in collaboration with the Royal College of Surgeons in Ireland, the Minister for Health, Leo Varadkar launched the event with Professor of Comparative Immunology, Cliona O'Farrelly, who fronted the bid for Trinity to host Ireland's contribution to this EU-wide initiative.

A new study led by researchers from the School of Medicine received a significant grant of €300,000 from the prestigious World Cancer Research Fund to investigate why obesity makes prostate cancer more aggressive and to see whether a simple exercise programme can improve quality of life and prolong survival for advanced prostate cancer patients.

Five young researchers were awarded Starting Investigator Research Grants or Career Development Awards from Science Foundation Ireland to help support their transition to becoming fully independent researchers. The Trinity award winners who secured €2.85 million in total were: Ussher Assistant Professor in Cancer Biology, Dr David Finlay, Research Fellow in Biochemistry, Dr Annie Curtis, and Research Fellow in Immunology, Dr Frederick Sheedy, (all three from the School of Biochemistry and Immunology), Assistant Professor in Chemistry, Dr Paula Colavita (School of Chemistry), and Ussher Assistant Professor in Creative Technologies, Dr Rachel McDonnell (School of Computer Science and Statistics).



John Pethica FRS FREng, Research Professor in the School of Physics and one of the founding directors of the Centre for Research on Adaptive Nanostructures and Nanodevices (CRANN) was knighted in the Queen's Birthday Honours list 2014 for services to science.

Professor of Experimental Immunology, Kingston Mills, won the 'Laboratory Scientist of the Year' award at the inaugural Irish Laboratory Awards ceremony in December 2013. His Immune Regulation Research Group was also honoured with the titles of 'Research Laboratory of the Year', 'Bio Science Laboratory of the Year', and overall 'Laboratory of the Year' in Ireland's scientific version of the Oscars.

Dr Pádraic Whyte, Assistant Professor in English received funding to develop a National Collection of Children's Books database and help establish Dublin as a world centre of children's literature research. Dr Whyte and his colleague Dr Keith O'Sullivan, Church of Ireland College of Education, were awarded a major Irish Research Council grant of over €350,000 to develop the children's book project. This interdisciplinary and inter-institutional project will also involve the examination of children's book collections in the city of Dublin.



Robbie the Robot, a prototype robot built at Trinity for Cork teenager Joanne O'Riordan, who was born without limbs due to a rare condition known as Total Amelia, was unveiled in March 2014. Designed with all of Joanne's needs in mind, Robbie can bend over and pick things up, blinks, smiles and frowns. In April 2012 Joanne addressed delegates at the *International Telecommunication Union's (ITU) 'Girls in ICT Day'* celebrations in New York and put forward a challenge for someone to build her a robot. Assistant Professor Kevin Kelly in the School of Engineering and his team took up this challenge. Thanks to a generous donation of €50,000 from the ITU, the team built a prototype humanoid robot.

Robbie was introduced to the Secretary General of the United Nations specialised agency for information and communication technologies, Dr Hamadoun I. Touré, at an event in Trinity, and the design team was awarded the 2014 Technological Innovation Award at the annual Engineers Ireland Excellence Awards.

A new resource to help young people with long-term illnesses make the transition into adult health services, developed in the School of Nursing and Midwifery, won a major healthcare award for Best Project in a Hospital at the 2014 Crystal Clear MSD Health Literacy Awards. The website *SteppingUp.ie*, funded by the Health Research Board, was developed by Trinity researchers in partnership with young people with long-term illnesses, such as cystic fibrosis, Type 1 diabetes and congenital heart disease.

Trinity's Green Data Centre was presented with a 2014 National Tech Excellence Award. Leading the way in energy efficiency, the Centre aligns key objectives such as providing a central enabling IT infrastructure with the University's 'Green agenda' to provide an energy efficient private cloud for the future which is centralised, has high availability and is scalable to match business needs. Sustainability and carbon reduction sit at the heart of Trinity's future strategies. It was with this in mind that the University insisted its new facility could be held up as an example of Global energy efficiency excellence.



5. Innovation and Commercialisation

Trinity Research & Innovation (TR&I) promotes and manages the interface between Trinity researchers, funding agencies and industry, through the Research Development Office, the Contracts Office, the Office of Corporate Partnership and Knowledge Exchange, and the Entrepreneurship Office.

One of the key elements of Trinity's Innovation and Entrepreneurship Strategy launched in November 2013, as noted above, was the establishment of the Office of Corporate Partnership and Knowledge Exchange (OCPKE) in March 2014 in order to facilitate increased engagement with industry. The mandate of the OCPKE is to implement Trinity's new Industry Engagement Strategy in addition to the existing technology transfer office (TTO) functions of management and appropriate commercial exploitation of all research-derived Intellectual Property (IP) and fostering the creation of campus companies.

5.1 Research Funding

During the 2013/14 academic year, 1,175 research funding applications, with an associated value of €432 million, were supported by the Research Development Office.

In the same period, 598 new research contracts were awarded to Trinity with a combined total value of €66.3 million; and Trinity awarded 218 contracts (worth €15.7 million) to external entities.

5.2 Intellectual Property

The OCPKE received 58 disclosures of novel intellectual property created by Trinity researchers, filed 23 new patent applications, and granted 30 commercialisation licences. These figures show a very considerable increase over the equivalent figures for the 2012/13 academic year and represent a significant achievement. The formation of four new Trinity Campus Companies was approved, reflecting an increased emphasis on quality and sustainability.

	2012/13	2013/14
Invention disclosure forms	48	58
Patents	16	23
Licences	9	30
Campus or Spin-out companies	5	4

5.3 Entrepreneurship and Innovation

The Entrepreneurship Office delivered a structured Entrepreneurship Programme to postgraduate students and researchers from 12 different Schools, and provided support, advice and mentoring to 36 students and Trinity graduates with innovative new company projects.

5.4 Launchbox

LaunchBox, Trinity's student incubator, completed its second year in 2014 and now has 37 alumni. It has proven to be an extremely successful accelerator programme for fledgling entrepreneurs: over 50% of LaunchBox companies have secured follow-on investment with in excess of €0.5 million raised in total by end of 2014. LaunchBox companies are now employing in excess of twenty people.

LaunchBox was assessed by the University Business Incubator (UBI) Index as a 'Top Challenger', placing it just outside the world's 'Top 25' from 800 incubators assessed objectively by the Index.

The incubator supports the entrepreneurs through the provision of coaching, expert advice, seed funding and access to the space and facilities needed to test out and launch the new ventures. It offers an innovative combination of practice and education, under the guidance of the Trinity 'Angels', a network of entrepreneurs and business experts made up of alumni and friends of Trinity.

One team, TouchTech Payments, formerly called Wave, signed a €50,000 investment agreement with an investor to help further develop its business idea of devising a system that allows people to pay for products by tapping their mobile phones with their credit/debit cards. Social enterprise *Foodcloud* raised €70,000 from professional investors and has secured a major deal with Tesco.

Additionally, the Group/Event Management system Hive raised €50,000 seed funding from Enterprise Ireland and €100,000 from RTE's Dragon's Den, while Artomatix, which develops tools for automating digital media creation, secured €100,000 in venture funding.



6. Human Resources

Trinity's Human Resources function supports the University in achieving its strategic goals through the recruitment, retention and development of excellent people. The Human Resources strategy 'Excelling Together' launched in 2014 was a response from Trinity's Human Resources function to the new College Strategy 2014-2019. It is written from the perspective that the Human Resources function is a strategic partner for the University.

6.1 University Staff

The Recruitment and Contracts Section handled appointments across the full range of University activity, from Chairs, Senior Lecturer-Consultant and academic appointments to technical, administrative and executive grade staff, including appointments in academic support units, facilities and student services. Two hundred and forty–nine recruitment competitions to fill 249 posts were managed, an increase of 34 from the previous academic year. At the end of the year, 244 posts were successfully filled which is a 98% success rate.

It should also be highlighted, as in previous years, that the foregoing recruitment activity occurred against the background of (a) each approval being considered in the context of the general provisions of the Employment Control Framework (ECF) in relation to essential posts, and (b) the University achieving its ECF target in core staffing of 1,667 full time equivalent posts by December 2013, a reduction of 43.2 FTE on the 2012 target.

The provisions of the Haddington Road Agreement on adjustments to salary, incremental progression, pension related deduction, overtime rates, exam payments and additional working hours were implemented in the period.

6.2 Professor Appointments

2013/2014 was a busy year for the Professorial recruitment team. The new Professor of Sociology commenced in post in the Faculty Arts, Humanities and Social Sciences at the beginning of the academic year. The Faculty was also successful with the recruitment of three other positions (Regius Professor of Law, Professor of Business Studies, and Professor of Music) with the new staff members due to take up their positions in the 2014/2015 academic year.

The Faculty of Health Sciences had three new Professors commencing in post in 2013/14: Professor of Neurology (Personal Chair), Professor of Paediatrics, and the newly established Professor Orthopaedics and Sports Medicine (Sports Surgery Clinic, Dublin). Three competitions commenced with the Faculty with one being successful and starting in 2014/15, one in negotiation with the successful candidate, and one unsuccessful at shortlisting stage.

The Faculty of Engineering, Mathematics and Sciences successfully recruited three positions: two Professors of Computer Science and a Professor of Inorganic Chemistry with the appointees commencing in the academic year 2014/2015. A fourth position (AMBER Director) is in the process of recruitment.

6.3 Senior Administrative Posts

In 2013/14 six appointments were successfully concluded and commenced in post during this period and they included the Executive Director of CRANN / AMBER, Librarian and College Archivist, Deputy Chief Financial Officer, Director of Financial Planning and Risk, Commercial Director and the Director of Bioresources. Five of the six recruitment competitions were supported by external Executive Search Partners.

7. University Initiatives and Key Events

There were several new initiatives and key events in Trinity during the academic year 2013/14.

The Trinity Global Graduate Forum hosted more than 100 of the University's most successful alumni in November 2013 at a special event aimed at gathering their views on the development of Trinity College Dublin. The two-day forum was the first time any university has invited its global graduates back to formulate plans to tackle some of the major challenges facing modern higher education, including funding, reputation, growth, technology and education. The graduates came from 16 countries representing 19 professions.

Trinity welcomed the German Chancellor, Angela Merkel in March 2014 at a joint event organised by the Provost and The Philosophical Society (The Phil), Trinity's oldest student debating society. The Chancellor was joined by An Taoiseach, Enda Kenny, on her visit where she addressed more than 190 Trinity students on the topic of 'Europe in a Globalised World'.

Her Royal Highness Princess Maha Chakri Sirindhorn of Thailand visited the University in September 2014. The Princess was shown a new plant species discovered in Thailand by Trinity botanists that has been named in her honour and she officially opened the garden in a newly developed square adjacent to the Botany Department. There she planted a native plant from Thailand sent specially for the occasion – *Rhododendron arboretum.* The Princess also paid a visit to the Old Library where she viewed the Book of Kells.

The Provost joined nineteen presidents of higher education institutions for a landmark event to sign a national charter, a 10 point 'Campus Engage Charter on Civic and Community Engagement', to underscore commitment to their institutions' civic and community engagement role in June 2014.

Over 6,000 people attended the World War 1 Roadshow in July, hosted by Trinity in partnership with RTÉ Radio 1 and the National Library of Ireland, as part of the Decades of Commemoration. The 'Family History Collections Day of World War 1 Memorabilia' invited members of the public to bring in family items, letters and mementos related to the war for digitisation and archiving by a team of experts. Other activities included a series of pop up talks and lectures, history tours of the campus related to the Great War, and the 'Last Cricket Match of Peace'. The day concluded with the Provost and Director General of RTE, Noel Curran, delivering the closing address and the final bugle call of the 'Last Post', played by bandsmen of the Army School of Music in Trinity College Chapel.

Trinity and the Royal College of Surgeons in Ireland offered the public a unique opportunity to get up close and personal with the world of research at Discover Research Dublin in September 2014. Over 50 free, interactive events and demonstrations showcased what researchers really do and why research matters. Exploring abstract and practical questions through a variety of digital and traditional formats - interactive installations, apps, social media, debates, digital archives, tours, presentations, and photography - Discover Research Dublin featured something for everyone. Participants immersed themselves in 3D visualisations of the brain, heard how we mend broken hearts, and took part in the LEGO challenge to build abstract prototypes under time pressure. Arts and Humanities research was showcased by duets involving raindrops and musicians, literary translation slams, experimental performances responding to Allen Ginsberg's Howl, and workshops exploring the interaction between text and context, from Papyri to Yeats.



Discover Research Dublin illuminating the fascinating world of research



The University opened its doors again to the public for the annual Culture Night and Open House Dublin events. In addition, the Department of Geography in the School of Natural Sciences put together a packed programme of events for World Space Week. Highlights included a comet-making workshop, 3D flight simulations over Mars and an audience with a NASA space scientist.

Trinity's front façade was lit up with animated illuminations as part of Dublin's New Year's Eve Festival and as part of the St Patrick's festivities as well.

Soapbox Science, an annual public science communication event, joined forces with Trinity's Centre for Women in Science & Engineering Research Centre (WiSER) and the Trinity Equality Fund to bring eleven of Ireland's leading women scientists to their soapboxes in Front Square in April to deliver dynamic 15-minute 'performances' about science and their research. This initiative, held around the UK and Ireland, transforms public spaces into arenas for learning and scientific debate with a particular focus on raising the profile of women in science.

The world's smallest shamrock was created by scientists in AMBER, Ireland's national materials science centre based in Trinity when they etched a nano sized shamrock with a stem c. 200,000 times smaller than a grain of salt for St Patrick's Day celebrations. The shamrock, 500 of which could fit side by side on a single human hair, was etched on to a Trinity silver lapel pin and presented to the recipient of the SFI St Patrick's Day Science Medal in Washington DC.

The Freyne Library, donated by the family of Seán Freyne (1935-2013), founding Professor of Theology in the original School of Hebrew, Biblical and Theological Studies, was officially opened by the Provost. It is a unique specialist library of biblical, archaeological and socio-historical studies on the Greco-Roman world, Jewish Hellenism and the Roman Near East. Its collection of 3,000 books offers multiple avenues to the region with which Prof Freyne's international reputation is associated: Galilee as a context for the ministry of Jesus and for the emergence of the early Jesus movement. In autumn 2013, commuters were treated to 12 thoughtprovoking images and statements about physics in Dart trains and stations. *DARTofPhysics* was designed by researchers in the Schools of Education and Physics and in CRANN, Trinity's centre for nanotechnology. In addition, Trinity students performed a series of eyecatching one to two minute physics demonstrations at Pearse Street station. The comprehensive website supporting the campaign won a prize in the Realex Fire Web Awards.



Dart of Physics researchers Dr Shane Bergin, Dr Jessamyn Fairfield, Aoibhinn Ní Shúilleabháin, and Professor Colette Murphy

Trinity College Library Dublin joined with The National Museum of Ireland to mark the 1000th anniversary of the Battle of Clontarf with two exhibitions. The battle of Clontarf is probably the best-known battle in Irish history, but also one of the least understood. The exhibition at Trinity College Library, entitled 'Emperor of the Irish': Brian Boru and the Battle of Clontarf, 1014, placed the historic Brian in his true context, while highlighting the development of his legend.



Trinity and the Royal Irish Academy of Music (RIAM), an Associated College of the University, presented a new series, the RIAM Alumni Signature series in 2014 during which the talents of some of the RIAM's outstanding alumni were showcased in four concerts.

Trinity announced a major acquisition of Samuel Beckett Papers when the Library acquired Beckett manuscripts and the working library of renowned Beckett scholar Stanley E. Gontarski. Prof Gontarski is the Robert O. Lawton Distinguished Professor of English at Florida State University, and has twice been awarded Fulbright Professorships. He was among Samuel Beckett's closest theatrical associates and is arguably the greatest living Beckett scholar. The new acquisition includes several drafts of Beckett's work *Ohio Impromptu*. Samuel Beckett entered Trinity College Dublin in 1923 where he specialised in French and Italian.

The Global Relations Strategy, launched in September 2012, continued to thrive. There has been a 19% increase in non-EU students, increasing from 1,224 in 2011/12 to 1,465 in 2013/14. The past year has seen increased recognition of Trinity in key regions and countries around the world, the continued development of worldwide teaching and research collaborations, further cultivation of Trinity's global alumni network and the integration of international experiences for all the University community. In June 2014, Prof Jane Ohlmeyer handed over to Prof Juliette Hussey who took up the role of Vice-President of Global Relations.

Since September 2013 memoranda of understanding have been signed with leading universities across a number of regions including Australia, Brazil, China, India, Kazakhstan, Malaysia, Mexico, Sri Lanka, Turkey and Taiwan. These agreements aim to promote academic partnerships in various fields and further develop existing collaborations between Trinity and partner institutions. A number of international campus events were organised by the Global Relations Office working with student societies to embrace and promote multiculturalism. These included the Indian festivals of Holi and Diwali, the Chinese New Year, and the North American holiday of Thanksgiving.

Trinity held its first ever 'Campus Open Days' in the United States in Rye, New York and North Bethesda, Maryland during which staff and students welcomed prospective students, families, and guidance counsellors to experience Trinity without leaving the US. In 2014 the School of Nursing and Midwifery opened its two-week international summer school. Nursing students travelled to Trinity from the Universities of Pennsylvania, Iowa, and Indiana along with faculty members and students from North Eastern University to learn about nursing, midwifery and global healthcare issues.



8. Capital Development Programme

8.1 Completed Projects

Academic Registry

The relocation of Biochemistry and Immunology to the new Trinity Biomedical Sciences Institute (TBSI) allowed for the refurbishment of the former Biotechnology Building, renamed the Watts Building. Completed in 2013, the building now provides purpose designed accommodation for sections of Physiology and Anatomy not housed in the TBSI. The remaining components of the project are the Global Room and the new Academic Registry – a single location for a wide range of academic services including Admissions, International Admissions/Study Abroad, Graduate Studies, Student and Graduate Records, and Timetabling and Examinations. The new Registry facilitates an integrated convenient service for students. The top floor of the building provides accommodation for the School of Engineering and Department of Botany.

Irish School of Ecumenics and Loyola Institute (refurbishment of Physiology Building)

The new location of the Irish School of Ecumenics and Loyola Institute was officially opened by the Minister for Education and Skills in March 2014. The transfer of the Discipline of Physiology to new purpose built accommodation allowed for the refurbishment of the former Physiology Building. This facilitated bringing the Irish School of Ecumenics onto the main Trinity campus from an off campus location in Milltown as well as providing space for the Loyola Institute, a joint initiative between the University and the Jesuit Community in Ireland.

The Irish School of Ecumenics engages in teaching and research into the causes of, and solutions for, religious, political and cultural divisions in human societies. It is joined in the new building by the Loyola Institute, concerned with teaching and research on theology in the Catholic tradition. Both form part of Trinity's Confederal School of Religions, Peace Studies and Theology, that attracts students nationally and globally from a diverse range of cultural and denominational backgrounds, providing a multicultural learning environment.

Green Data Centre

Space in Aras an Phiarsaigh was reallocated and converted to provide a Green Data Centre for the University. The building contract was completed in early 2013 at a cost of €2 million. The Data Centre is one of the greenest in its category and won 'Data Centre of the Year' in the 2014 National Tech Excellence Awards. During 2013, many systems were moved to the new Data Centre including the infrastructure and systems that support the new Student Information System (Genesis) and the new Financial Information System. The Green IT group is looking at ways to reduce costs by consolidating IT systems and services in the new Data Centre and looking at sustainable IT solutions for the future.



Trinity Global Room in the Watts Building



8.2 Construction Projects

Trinity Business and Innovation Hub

A design team has been appointed and design work has commenced on a €70 million project to provide a new and expanded Business School together with a Research & Innovation Hub and accommodation for Corporate Services on Pearse Street incorporating the site of the Luce Hall (former Sports Centre). The project, spanning 13,000 sq.m., will include a 600-seat auditorium, restaurant spaces for 200 people, public space where students can meet and ideas exchange, 'smart' classrooms with the latest digital technology, and a rooftop conference room. Enabling work to vacate existing buildings on the site commenced in the second half of 2014. Subject to planning permission the main construction project is scheduled to start in 2015 and the project is scheduled for completion in early 2017.

E3 - Trinity Engineering, Energy and Environment Institute

Completion of the Trinity Biomedical Sciences Institute has cleared site space at the east end on the campus to facilitate further large scale developments there. This site is designated in the Development Plan for the provision of new accommodation for Engineering and Natural Sciences. Following a procurement process in accordance with EU procedures the consultant project managers and architects have been appointed. The project was paused in late 2011 and an Academic Review of the proposed activities was undertaken. In late 2013 an interim project steering Committee was established to prepare a brief, a business case and fundraising strategy for the project.

Institute of Population Health

The Board of the College has approved the purchase of three floors of a completed building in Tallaght, adjacent to the Hospital, to provide some 2,500 sq.m of accommodation for the Institute of Population Health. Fit out works will be required at an estimated cost of some €2.5 million. Subject to planning approval, the works are scheduled for execution in 2015.

Residential Accommodation

New Square East

Work on the refurbishment of residential accommodation in Houses 38 and 40 New Square as the latest phase of the programme to upgrade Residential Accommodation started in June 2013 and was completed in March 2014 at a cost of \in 3.65 million.

Additional Residential places

The level of residential accommodation provided by Trinity is low by international standards. The need to expand residential capacity is recognised in the Strategic Plan. A procurement process to identify a developer to design, build, and finance an initial phase of 1,000 places on a site or sites within a short commuting time of the university did not provide an acceptable solution. Accordingly, a range of alternative options is being explored aimed at providing a substantial increase in residential accommodation at the earliest opportunity.

Facilities for Outdoor Sports

A phased redevelopment of outdoor sports facilities commenced with the resurfacing of the Botany Bay Tennis Courts and the relaying of the Rugby Pitch in College Park with a new sand based surface. The new pitch came into use in October 2014 and the installation of floodlights in 2015 will complete the development project. Other elements of this project will include the provision of a new hockey pitch and enhanced all weather facilities at our sports grounds on Santry Avenue.



8.3 Energy Conservation

In 2013/14 Trinity College consumed 36.8 million kWh of electricity (3.6% reduction from 2012/13) and 42.5 million kWh of natural gas and oil (15% reduction from 2012/13). Efforts to manage electricity on the main city centre campus were very successful with electricity consumption falling by 5.3%. The decrease in gas and oil consumption is related to multiple factors. Heating plant was matched to heating demand and time schedules amended on an ongoing basis to meet occupancy demands. The academic year 2013/14 was warmer than the previous year giving opportunities to generate energy reductions.

During 2013/14 efforts continued to monitor and reduce energy consumption in the largest research and science building, the Trinity Biomedical Sciences Institute (TBSI). This energy conservation project has reduced the combined electricity and gas consumption in TBSI by 9.7% since the previous year. This has been achieved by modification of heating and ventilation controls and the utilisation of the Combined Heat and Power (CHP) plant to reduce imported electricity and recovery of waste heat to heat the building.

Trinity continued to work with the inter-university energy project, e3, comprising Trinity, UCD, DIT and DCU. The project monitors energy consumption for the larger buildings within the University and targets energy reductions by optimising operations and controls. Information gained from work in TBSI is applied to other high energy science buildings in Trinity.

The current energy conservation target is directly linked to the current National Energy Efficiency Action Plan 2 (NEEAP 2). The national public sector programme is to reduce primary energy consumption by 33% by the year 2020 measured against a base year. The Energy Performance Index (EnPI) used by the University is primary energy per research equivalent area per annum. The most recent report confirms the energy intensity as measured by the EnPI has reduced (improved) by 15.2% since the benchmark year. The objective is to continue to improve the EnPI by approximately 3% each year to reach the target of 33% by year 2020. Several refurbishment projects were completed during the year that included major elements of design to improve energy performance. Residential accommodation in Houses 38 and 40 had extensive upgrading to insulation, lighting and heating installations. The building was fitted with a domestic solar hot water system and a rain water harvesting system. Other refurbishment projects included lighting replacement, oil boiler upgrading to natural gas, lecture theatre lighting replacement, improvement of heating controls and energy efficient pumping. These refurbishments and similar refurbishment works are excellent opportunities to improve the overall energy performance of Trinity's buildings.

The net expenditure for the year 2013/14 for utility cost amounted to €6.6 million (€7.3 million for 2012/13). Savings were achieved due to reduced energy consumption and reduction in some elements of tariff structures. All electricity and gas supplies were procured via the national frameworks set up by the Office of Government Procurement (OGP). This project utilises the larger collective procurement power of similar university sector bodies to secure the most competitive unit energy prices in the market place.



9. Fundraising

Significant funding is required if the University is to confirm its position as one of the world's leading universities. Now more than ever, it is clear that if Trinity wishes to represent Ireland globally, it cannot rely on State funding alone - securing private support is becoming ever more essential to the University's future.

To this end, Trinity Foundation raises funds from the University's alumni and friends. In the period 1 October 2013 to 30 September 2014, in excess of €15 million was secured in private donations (€18 million in 2012/13) from 2,579 donors. The benefits of this private support can be seen throughout the University.



Science Gallery Dublin

Pledges and gifts secured by Trinity in the year ended 30 September 2014 were allocated into five main categories: capital - €5.6 million; research - €3.1 million; student and scholarships - €2.8 million; student experience and outreach - €2 million; and posts - €1.6 million. Thanks are due to the many donors who have contributed through the Annual Appeal, by leaving a legacy of providing direct support to one of Trinity's strategic priorities which include:

- Ageing
- Cancer
- Neuroscience
- E3, Trinity's Engineering, Energy and Environment institute, a major new engagement between Engineering and Natural Sciences
- Refurbishment of the Library with expanded Humanities research facilities
- Building an Innovation Campus incorporating a New Business School
- Science Gallery
- Trinity Access Programmes and bursaries for students.

In 2013/14, 873 donors gave a gift for the first time, an increase of 5% from the previous year, 44 countries were represented by donors, and Trinity welcomed six new 'Benefactors through the Centuries': donors who have contributed over €1,000,000 to the University.

Central to the University's fundraising success is the outstanding contribution of the many volunteer groups that support Trinity including the TCD Association and Trust, the Business School's Advisory Board, the Engineering Advisory Board, the Trinity Business Alumni, the Science Gallery Governing Board, Classics Advisory Board, South Asia Initiative Advisory Board, the USA Fund and the UK Trust. These volunteers give their time, strategic input and considerable financial support for which the University is extremely grateful. Special mention is due to the Board of Trinity Foundation, which plays a key role in co-ordinating Trinity's philanthropic strategy.



10. Financial Position

The Consolidated Financial Statements for the year ended 30 September 2014, approved by the Board on 24 June 2015 reported a planned deficit of €21.8m (2012/13: deficit of €22.5m) for the year-ended 30 September 2014. Please see below a breakdown of the key categories of income and expenditure for the year ended 30 September 2014 and prior year comparatives.

Consolidated Income & Expenditure	2013/14	2012/13
Consolidated Income	€326.1m	€318.4m
State Grant	€47.2m	€54.4m
Academic Fees	€122.1m	€116.1m
Research Grants	€78.0m	€74.6m
Other Income	€78.8m	€73.3m
Consolidated Expenditure	€347.9m	€340.9m
Staff Costs	€225.7m	€221.7m
Other Expenses	€122.2m	€119.2m
Consolidated Deficit	(€21.8m)	(€22.5m)

The University has a strong Balance Sheet with net assets in excess of €900 million, having made significant capital investment in recent years. The University has invested heavily in IT transformation and capital projects including the new college-wide Financial Information System which is currently being embedded. The Trinity Endowment Fund continues to be a significant source of income to the University, €7m for 2013/14 (2012/13: €6.5m). Endowment assets have grown 12.7% in this financial year and were €165.1m as at 30 September 2014. The level of research activity for 2013/14 recorded in the Consolidated Financial Statements (measured on the basis of expenditure activity during the year and not income received) amounted to €78.0m (2012/13: €74.7m). The value of new awards entered into in the year amounted to €67m (2012/13: €127m), bringing the total value of the Research Portfolio to €480m as at 30 September 2014. Trinity's recent success in the SFI Research Centres Programme (whereby Trinity is hosting three Centres and has a significant role in three others) as well as a strong start to Horizon 2020 (Trinity has received nine ERC awards to date) means that there is cause for a certain amount of optimism. Current projections are that research expenditure may remain at c.€80m over the next 3-4 years. This positive outlook is dependent on Trinity meeting the challenging targets set by the Research Diversification Strategy as well as the Exchequer at least maintaining its current level of investment in Research.





The University has faced, and indeed continues to face, a number of challenges particularly in recent years given the straitened economic circumstances in Ireland and the continuing decline in State funding for higher education. The financing of higher education on a sustainable basis is yet to be addressed comprehensively, although the Department of Education and Skills is due to report on long-term sustainable funding for Irish universities by the end of 2015. Since 2008 the core recurrent grant to universities has decreased by over 50%, the impact of which has been partially offset by increased student contribution charge and reduced pay rates as a consequence of Haddington Road and the Croke Park agreements.

The University continues to focus on key areas of non-Exchequer income generation: international students, online learning, commercialisation, research diversification, industry engagement and philanthropy to diversify and grow Trinity's income streams. To address the divergence between escalating enrolments and the decline in Government funding in the sector the University has targeted an Exchequer/non-Exchequer income ratio of 40:60 by 2018/2019. The percentage of total income that related to non-Exchequer sources in 2013/14 amounted to 50% (2012/13: 47%). Even in this challenging environment Trinity has managed its income well and by actively managing its cost base through incentivised budget allocations and savings realised in procurement it has shown itself to be resilient throughout the period of economic crisis since 2008.

Currently the University is planning balanced operational budgets, however with provision for asset renewal and investment in approved income generation and cost reduction strategies, the University will report planned deficits for the next 3-4 years. The University has a clear plan to return to surplus in 2018/2019 with strategies in place to achieve its target of 2%-3% surplus by this time. It is recognised that producing consistent surpluses is crucial to support the University's strategic objectives and to secure its financial sustainability. The University is committed to focusing on the key areas of income generation and cost management as outlined above to realise its ambitions as set out in the Strategic Plan 2014-2019.



Appendix I

Attendance at Board meetings 2013-14

The total number of meetings held during the year was 14 (including a joint meeting of Board and the University Council on 18 June 2014).

Ex-officio members:

Provost (Dr Patrick Prendergast) (14), Vice-Provost/Chief Academic Officer (Professor Linda Hogan) (13), Senior Lecturer/Dean of Undergraduate Studies (Professor Patrick Geoghegan) (13), Registrar (Professor Shane Allwright) (14), Bursar (Professor Gerard Lacey) (13).

Elected members:

Professor Sean Barrett (11), Professor Mélanie Bouroche (11), Mr Frederick Cowzer (14), Professor William Dowling (14), Professor Eileen Drew (10), Ms Sheila Dunphy (12²), Mr Dermot Frost (12), Mr Gerrard Garrahan (13), Professor Hugh Gibbons (13), Professor Robert Gilligan (9), Professor Nicola Marples (14), Professor John McGilp (13), Professor Cliona O'Farrelly (12), Professor Desmond O'Neill (8), Professor Micheál Ó Siochrú (12), Professor Henry Rice (11).

External members:

Dr Olive Braiden (9), Mr Jackie Gallagher (13).

Student members:

Mr Tom Lenihan (13), Mr Stephen Garry (11), Mr Jack Leahy (12), Mr Ryan Kenny (14).

Appendix II

Board Expenses 2013-14

In 2013-14 the following was paid to Board members (the financial year begins on 1 October):

Prof Des O'Neill: €32.50



Appendix III

CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT Year ended 30 September 2014

		2014	2013
		€'000	€'000
I	ncome		
	State grants	47,279	54,469
A	Academic fees	122,169	116,138
F	Research grants and contracts	78,004	74,670
A	Amortisation of deferred capital grants	11,599	13,245
	Other operating income	51,243	50,535
	nterest income	866	2,811
(Other finance income/(expense)	-	-
E	Endowment income	7,022	6,529
(Gain on revaluation of investment properties	7,881	-
٦	Fotal Income	326,063	318,397
E	Expenditure		
5	Staff costs	225,756	221,756
(Other operating expenses	89,368	84,991
I	nterest payable	4,217	4,171
[Depreciation	28,554	27,307
L	loss on revaluation of investment properties	-	2,681
٦	Fotal Expenditure	347,895	340,906
[Deficit for the year before taxation	(21,832)	(22,509)
٦	Faxation	-	-
[Deficit for the year after taxation	(21,832)	(22,509)
	ess: Surplus for the year transferred to accumulated ncome in endowment funds	(1,588)	(1,865)
	Deficit for the year retained within revenue reserve	(23,420)	(24,374)



Appendix IV

CONSOLIDATED AND COLLEGE BALANCE SHEETS Year Ended 30 September 2014

		Consolidated		College
	2014 €'000	2013 €'000	2014 €'000	2013 €'000
Fixed assets				
Fixed assets 761 Investment properties 46 808 808 Endowment assets 165 Current assets 165 Debtors 47 Stock 47 Cash at bank and in hand 21 Short term deposits 148 Creditors: amounts falling due within one year 217 Creditors: amounts falling due within one year 1,043 Creditors: amounts falling due within one year 1,043 Met current assets 70 Net current assets less current liabilities 1,043 Pension liability (1,423, Pension liability 1,423 Pension receivable 1,423	761,668	765,807	761,620	765,727
Investment properties	46,369	42,517	46,369	42,517
	808,037	808,324	807,989	808,244
Endowment assets	165,113	146,508	165,113	146,508
Current assets				
Debtors	47,916	53,837	47,859	54,877
Stock	320	468	320	468
Cash at bank and in hand	21,677	44,736	10,383	35,903
Short term deposits	148,048	140,835	135,563	128,230
	217,961	239,876	194,125	219,478
Creditors: amounts falling due within one year	(147,528)	(144,443)	(135,900)	(137,274)
Net current assets	2014 $\epsilon^{1}000$ 2013 $\epsilon^{1}000$ 2014 $\epsilon^{1}000$ 761,668 46,369765,807 42,517761,620 46,36946,369 808,03742,517 808,32446,369 807,989165,113146,508165,113165,113146,508165,11347,916 320 21,67753,837 44,73647,859 	82,204		
Investment properties Endowment assets Current assets Debtors Stock Cash at bank and in hand Short term deposits Creditors: amounts falling due within one y Net current assets Total assets less current liabilities Creditors: amounts falling due after more than one yea Net assets excluding pension (liability)/as Pension liability Pension receivable	1,043,583	1,050,265	1,031,327	1,036,956
	(134,280)	(134,132)	47,859 320 10,383 135,563 194,125 (135,900) 58,225 1,031,327 (134,280) 897,047 (1,423,616))) (134,132)
Net assets excluding pension (liability)/asset	909,303	916,133	897,047	902,824
Pension liability	(1,423,616)	(1,179,497)	(1,423,616)	(1,179,497
Pension receivable	1,423,616	1,179,497	1,423,616	1,179,497
Net Assets	909,303	916,133	897,047	902,824



Trinity College Dublin The University of Dublin





Ireland's EU Structural Fund Programmes 2007 - 2013 Co-funded by the Irish Government and the European Union



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EUROPEAN UNION STRUCTURAL FUNDS